

Remarks

The final Office action mailed May 2, 2006, has been reviewed and carefully considered. Claims 1, 7, 19-22, 25, and 29 have been amended for further clarification. Support for these amendments is found in the specification, for example, at page 11, lines 16-22. New claims 33-35 have been added. Support for new claims 33-35 is found in the specification, for example, at page 1, line 28 – page 2, line 17. Claims 17-18 and 32 have been canceled without prejudice for filing a divisional application. Entry of these amendments is respectfully requested.

Restriction Requirement

The Office action states that none of the withdrawn claims are drawn “to a process of using that adhesive.” However, claims 13-16, and 31 are, in fact, drawn to methods for making a lignocellulosic composite that include using “an adhesive composition according to claim 1” (claim 13) or “an adhesive composition according to claim 29” (claim 31). Thus, applicant is unable to understand how claims 13-16 and 31 are not drawn to a process of using the adhesive that includes all the limitations of the base claim.

35 U.S.C. §102 Rejection

Claims 1, 3 and 6 stand rejected under 35 U.S.C. §102(b) over Sarjeant. The Office action states that column 4, lines 72-75 and column 2, lines 51-53 of Sarjeant are “indicative that there will be no free-formaldehyde in the adhesive composition since it is either removed or further reacted.” Applicants first point that the claims state that the composition is “substantially formaldehyde-free,” not that there is no free formaldehyde in the composition. The significance of this distinction is now emphasized by specifying in claims 1, 19-22, 25, and 29 that the composition “is substantially free of any compounds that degenerate to form formaldehyde” (emphasis added).

As pointed out in the Amendment and Reply mailed on February 15, 2006, the phenolic resin included in the Sarjeant composition is a hybrid phenol/urea/formaldehyde resin regardless of whether any excess free formaldehyde has been “removed” since it is made by reacting phenol with

paraformaldehyde (see column 2, lines 51-53) and then with urea. Such hybrid phenol/urea/formaldehyde resins generate and release formaldehyde during curing, and over time from the finished product (see page 1, line 28 – page 2, line 13, of the present application). Contrary to the compositions recited in claims 1, 19-22, 25, and 29, the phenol/urea/formaldehyde resin of Sarjeant degenerates to form formaldehyde.

Furthermore, the Sarjeant composition also includes hexamethylene tetramine. Hexamethylene tetramine also decomposes to release formaldehyde, and thus also would be excluded from the compositions recited claims 1, 19-22, 25 and 29.

In summary, the Sarjeant composition includes at least two components that degenerate to form formaldehyde. Thus, the pending 35 U.S.C. §102(b) rejection over Sarjeant must be reconsidered and withdrawn.

As a separate ground supporting patentability, applicants note that claim 7 and claims 33-35 recite an adhesive composition that does not include a phenol-formaldehyde resin or a urea-formaldehyde resin. The Sarjeant composition includes such resins, and thus cannot anticipate or render obvious claim 7 and claims 33-35.

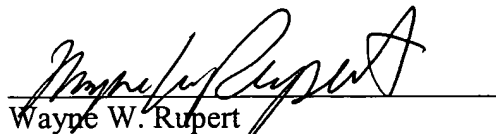
35 U.S.C. §103 Rejection

Claims 1-12 and 19-28 have been rejected under 35 U.S.C. §103 over Sarjeant combined with Brode, III et al. or Blount. As discussed above in connection with the 35 U.S.C. §102 rejection, Sarjeant discloses a composition that includes at least two components that degenerate to form formaldehyde. The disclosures in neither Brode, III et al. nor Blount compensate for this fatal flaw in Sarjeant. Brode, III et al. and Blount are relied upon for allegedly suggesting substituting a decayed lignocellulosic material for the lignin preparation in the Sarjeant composition. Neither one of the secondary references suggest any substitute for the formaldehyde-generating components of the Sarjeant composition.

It is respectfully submitted that the application is in condition for allowance. Should there be any questions regarding this application, examiner Nutter is invited to contact the undersigned attorney at the telephone number shown below.

Respectfully submitted,

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